



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO24258**

Purchase Order Date 5/20/2014

PO Print Date 5/20/2014

Page Number 1 of 2

**Order From :**

VU-BEA001

**Ship To :** DART AEROSPACE LTD

B/E AEROSPACE INC  
88289 EXPEDITE WAY  
CHICAGO, IL 33172  
USA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone** 305-925-2600

**Buyer**

Michael Gregoire

**Customer POID**

**Customer Tax #**

10127-2607

**Ship To Contact**

**Ship To Phone**

**Terms**

Net 30

**Ship Via:**

FedEx PI collect

**Currency**

USD

**Ship Acct:**

**FOB**

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	AN3-5A	Bolt	5/27/2014 Yes 5/27/2014	FN	1,000.00 Each	\$0.09	\$90.00
Line Total:							\$90.00
2	AN525-416R10	Screw	5/27/2014 Yes 5/27/2014		50.00 Each	\$0.30	\$15.00
Line Total:							\$15.00
3	MS20257C4-7200	HINGE	5/27/2014 Yes 5/27/2014		6.00 f	\$5.83	\$35.00

Attn: Sylvie Boucher

Note:

5/20/2014



# B/E Aerospace, Inc.

Page: 1 of 1

## CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191  
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR  
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


### Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

**FIRM: DART AEROSPACE LTD**

**PURCHASE ORDER#: PO24258**

LINE#	QUANTITY	U/M	PART-NUMBER	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
1	1000	EA	AN3-5A	66266	MAC FASTENERS	0RFT4		

  
Jason Lewis  
Vice President of Quality

05/20/14

**MACFASTENERS, INC.**

1110 Enterprise Street

Ottawa, KS 66067

Phone: 785-242-8812

Fax: 785-242-4616

***Packing List*****Bill** B/E AEROSPACE CONSUMABLES MGMT**To:** 10000 NW 15TH TERRACE

MIAMI, FL 33172

**Ship** B/E AEROSPACE CONSUMABLES MGMT**To:** 9835 NW 14th Street

Miami, FL 33172

United States

**Shipment No:** 60889**Shipment Date:** 10/17/13**Ship Via:** United Parcel Service**Order Number:** 47124**Order Date:** 12/30/12**Customer Code:** BE AEROSPACE**Phone:** (305) 925-2600**PO Number:** 0LXH03**Terms:** Net 30 Days

LOT #66266

<u>Item</u>	<u>Quantity</u>				<u>Unit</u>	<u>Description</u>	<u>Job Number</u>
	<u>Open</u>	<u>Shipped</u>	<u>Back Ord</u>	<u>Canceled</u>			
3	100,000	120,000	0		M	AN3-5A Bolt, machine— Aircraft	66266

**MAC FASTENERS, INC.**  
**1110 ENTERPRISE**  
**OTTAWA, KANSAS 66067**

**CERTIFICATE OF CONFORMANCE  
AND  
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0LXH03

PART NUMBER: AN3-5A

REV: 2

LOT NUMBER: 66266

MANUFACTURED QUANTITY: 120,000

MILL HEAT NUMBER: 8193290

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

**MERCURY FREE CERTIFICATION**

MacFasteners Inc. certifies that the parts referenced in the above lot number  
do not contain Mercury or Mercury compounds, and were  
manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured  
by MAC FASTENERS, INC. within the United States, and were processed in accordance with all  
applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 10/16/13

  
QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company- SAI GLOBAL - 0058029

MAC FASTENERS, INC.  
1110 EAST ENTERPRISE  
OTTAWA, KS 66067

## CHEMICAL & PHYSICAL TEST REPORT

CUSTOMER B/E AEROSPACE	PO NUMBER 0LXH03	MFG QUANTITY 120,000	DATE 10/16/13
PART NUMBER AN3-5A	REV 2	LOT NO 66266	PROCUREMENT SPEC NASM6812

MATERIAL TYPE 8740				MATERIAL SPECIFICATION MIL-S-6049/AMS6322				MILL HEAT NUMBER 8193290			SUPPLIER JOHNSTOWN		
C .40	Si .24	Mn .77	P .010	S .010	Cu .10	Ni .52	Cr .58	Mo .26	V .002	B	Fe	Al .023	Ti
	Co	N .0060	Bi	Pb	Mg	Zn		Nb	Sn .005			Other	

### MECHANICAL TEST RESULTS - TESTING PER NASM1312

ULTIMATE TENSILE STRENGTH POUNDS	
3,080	
3,080	
3,070	
3,090	
3,090	
MIN. REQ.	2,210

DOUBLE SHEAR STRENGTH POUNDS / PSI	
TOO SHORT TO TEST PER NASM1312-13	
MIN. REQ.	

HARDNESS	
ROCKWELL "C" SCALE	
REQ.	26 - 32 HRC
SAMPLE SIZE	5
ACTUAL RESULTS 28 - 30 HRC	

METALLURGICAL EXAMINATION			
Discontinuities	<input checked="" type="checkbox"/>	Carb/Decarb	<input checked="" type="checkbox"/>
Grain Flow	<input checked="" type="checkbox"/>	Microstructure	<input checked="" type="checkbox"/>
Grain Size	<input checked="" type="checkbox"/>	Appearance	<input checked="" type="checkbox"/>
Thread Inspection FED-STD-H28/20 - ASME B1.3		System 21 <input type="checkbox"/>	System 22 <input checked="" type="checkbox"/> System 23 <input type="checkbox"/>

NDT/ ADDITIONAL TESTS	
Magnetic Particle Inspection per ASTM E1444	<input type="checkbox"/>
Liquid Penetrant Inspection per ASTM E1417	<input type="checkbox"/>
Recess Torque Test	<input type="checkbox"/>
Head Marking	<input checked="" type="checkbox"/>
Magnetic Permeability ASTM A342 less than 2.0	<input type="checkbox"/>

### TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.

  
Quality Assurance Representative

AS9100C REGISTERED  
SAI GLOBAL - 0058029

MAC FASTENERS, INC.  
1110 ENTERPRISE  
OTTAWA, KANSAS 66067

## HEAT TREAT CERTIFICATION

CUSTOMER: B/E AEROSPACE

DATE: 10/16/13

PO NUMBER: 0LXH03

MANUFACTURED QUANTITY: 120,000

PROCESSOR:

BODYCOTE MCLEAN - NADCAP ID 4464

LOT NUMBER: 66266

MATERIAL: TYPE 8740

PART NUMBER: AN3-5A

REVISION: 2

REQUIRED HARDNESS: 26 - 32 HRC

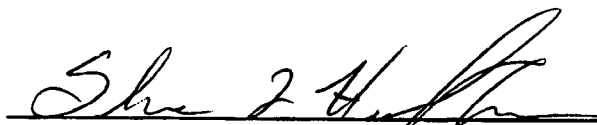
SAMPLE SIZE: 5

HARDNESS: 28 - 30 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

Notes:

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.



QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company - SAI GLOBAL - 0058029

COMMERCIAL PLATING COMPANY

TC-4500 XRF ST

Sat Jun 14 00:53:20 1997

COMMERCIAL PLATING CERTIFICATION AND TEST RESULTS

This is to certify that the order described below was plated to comply with the agreed upon requirements of the requested specification.

DATE: 10/12/13

CUSTOMER: MAC FASTENERS

PART NUMBER: AN3-5A

DESCRIPTION: BOLT

ORDER NUMBER: 91277

LOT NUMBER: 66266

TOTAL WEIGHT: 810 LBS

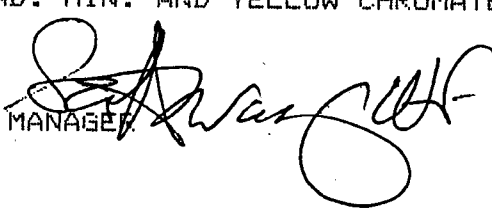
PIECES PLATE TO GAUGE: Y

SPECIFICATION: SAE AMS QQ-P-416C, TYPE II, CLASS 2

REQUIREMENTS: 0.0003 CAD. MIN. AND YELLOW CHROMATE

AUTHORIZED SIGNATURE:

TITLE: QUALITY CONTROL MANAGER





# Johnstown Wire Technologies

124 Laurel Ave,  
Johnstown, PA 15906

Phone: 814-532-5680  
Fax: 814-532-5684

WORK ORDER  
786093

## TEST REPORT

LOT NUMBER  
**K-8193290**  
SALES ORDER / RLS  
**002094 / 2**

SOLD TO

Mac Fasteners, Inc.  
C/O TD Logistics Inc.  
14505 W 100th Street  
Lenexa, KS 66215  
USA



CUSTOMER P.O. <b>50516</b>	CUSTOMER PART	QUANTITY <b>37,981 LBS</b>	COILS <b>19</b>	LADING NO <b>00119013</b>	SHIPMENT DATE <b>08/09/2013</b>							
SPECIFICATION <b>MacFast-87186</b> <b>AMS2301; AMS6322; AMS-S-6049A; MIL-S-6049A 8740 DFARS Defense Federal Acquisition Regulation</b> <b>Supplement Silicon Killed Fine Grain Aircraft Quality/Cold Heading Quality Drawn From Annealed Rod</b> <b>Spheridize Annealed In Process Heavy Phos &amp; Light Lube Ctd</b> <b>Size: .1865 +.001 -.000</b>												
CERTIFICATION REQUIREMENTS												
Chemical												
C	Mn	P	S	Si	Al	Ni	Cr	Mo	Cu	V		
.40	.77	.010	.010	.24	.023	.52	.58	.26	.10	.002		
Cb	Ti	N	Sn									
.000	???????	.0060	.005									
Physical												
AMS 2301	J1	J10	J11	J12	J2	J3	J5	J4	J6	J7	J8	J9
0000	56	40	38	36	55	55	53	54	52	50	46	43
MacroClean E-381												
111												
Mechanical												
TEST	UNITS		HIGH		LOW		AVERAGE					
Tensile Str	Lbs/SqIn		82000		80000		81000					
RA Per Cent	Percent		73.7		69.2		71.5					
Decarb FFD	Inches		.000		.000		.000					
Surface def. depth	Inches		.000		.000		.000					
Rod / Melt Source												
Rod Source	Melt Source		Country of Origin		Nafta							
Republic	Republic		USA		Yes							
End of Certification												

I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWT A2LA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the items tested.

*Daniel J. Malik*  
Daniel J. Malik Director of Quality Assurance





## CERTIFICATE OF TESTS

 1807 EAST 28TH ST.  
 PHOENIX, AZ 85001

 LORAIN, OH 44055  
 FAX: 330-438-6495

REPUBLIC STEEL

 6/24/2013  
 2:46:00 PM  
 PAGE 1 OF 2

 PURCHASE ORD: 84084  
 PART NUMBER: FXT40AA-.375  
 ORDER NUMBER: 1547434 - 01  
 HEAT: 8193290

 PURCHASE ORDER DATE: 3/4/2013  
 ACCOUNT NUMBER: 5672-1921-01  
 SCHEDULE: 1927-93  
 REVISION: 1

===== CHARGE ADDRESS ===== SHIP TO =====

 JOHNSTOWN WIRE TECHNOLOGIES  
 124 LAUREL AVE  
 JOHNSTOWN, PA 15906

 JOHNSTOWN WIRE TECHNOLOGIES  
 EDWARD ZAPOLA  
 C/O C & BL RAILROAD  
 TRACK 629  
 JOHNSTOWN, PA 15901

## ----- MATERIAL DESCRIPTION -----

 HOT ROLLED STEEL COILS ALLOY AMS 2301K JOHNSTOWN WIRE SPEC RW-100 REVISION DTD 04/21/04 EXC PARA  
 10.3 AMS 6322N EXC HARD JOHNSTOWN WIRE SPEC RW-005 REVISION DTD 12/31/00 EXC SURFACE DEFECTS  
 JOHNSTOWN WIRE SPEC PART NO. FXT40AA REVISION DTD 12/31/00 MIL S 6049A & AMD 1 COND B-1 EXC MARK &  
 UT WAIVED EF-AISI-8740-H FINE GRAIN VACUUM DEGAUSED AIRCRAFT QUALITY FIXED PRACTICE QUALITY  
 RESTRICTED CHEMISTRY RESTRICTED MAX INCIDENTAL ELEMENTS  
 SIZE: RDS .3750 DIAM X COIL  
 RDS 9.5250MM DIAM X COIL

## ----- LADLE CHEMISTRY % -----

C	MN	P	S	SI	CU	NI	CR
0.40	0.77	0.010	0.010	0.24	0.10	0.52	0.58
V	MO	SN	AL	B	CB	N	
0.002	0.25	0.065	0.023	0.0000	0.000	0.0060	

## ----- CALCULATED TESTS -----

REDUCTION RATIO 1,177.6 TO 1

 AUSTENITIC GRAIN SIZE 5 OR FINER BASED ON A TOTAL ALUMINUM CONTENT EQUAL TO OR GREATER THAN .020% PER ASTM  
 A29.

## ----- SEMI - FINISHED RESULTS -----

 JOMINY HARDNESS TEST SAE J406/ASTM A255  
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 20 22 24 26 28 30 32  
 56 55 55 54 53 52 50 46 43 40 38 36 36 34 33 32 31 30 30 29 29 29 28 28

 MACRO ETCH TEST ASTM E381/MIL STD 430  
 ETCHANT: HCL TEMPERATURE: 170  

	S	R	C
AVG	1	1	1

 MAGNETIC PARTICLE TEST AMS 2301 AMS2304 AMS2300  

	IND	AVG	IND	AVG
PCE 03	0	0	0	0

## ----- FINISHED SIZE RESULTS -----

 DECARBURIZATION TEST SAE J419/ASTM E1077/JIS G0558  
 ETCHANT = NITAL MAGNIFICATION = 100X

	SPIKE	COMPLETE	TOTAL
	INCHES	INCHES	DEPTH
			INCHES
PCE 6581	0.002	0	0.002

 G. KRUTH  
 DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES



## CERTIFICATE OF TESTS

1807 EAST 28TH ST.  
SHOWS: 330-438-5180LORAIN, OH 44055  
FAX: 330-438-5495

REPUBLIC STEEL

6/24/2013  
2:46:00 PM  
PAGE 2 OF 2PURCHASE ORD: 84084  
PART NUMBER: FXT40AA-.375  
ORDER NUMBER: 1547434 - 01  
HEAT: 8193290PURCHASE ORDER DATE: 3/4/2013  
ACCOUNT NUMBER: 5672-1921-01  
SCHEDULE: 4927-93  
REVISION: 1

CAPABLE OF SEAM DEPTH 1% MAX DIAMETER NOT LESS THAN .005 MAX

## NOTES

CHEMICAL ANALYSIS CONFORMS TO APPLICABLE SPECS: ASTM E415, LBL10129, LBL10130, ASTM E1019, LBL10158, LBL10114, AND ASTM E1085, LBL10184, LBL10188.

REPUBLIC STEEL HEREBY CERTIFIES THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND TESTED IN

## NOTES (CONTINUED)

ACCORDANCE WITH THE METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS AND BASED UPON THE RESULTS OF SUCH INSPECTION AND TESTING HAS BEEN APPROVED FOR CONFORMANCE TO THE SPECIFICATIONS.

CERTIFICATE OF TESTS SHALL NOT BE REPRODUCED EXCEPT IN FULL.

ALL TESTING HAS BEEN PERFORMED USING THE CURRENT REVISION OF THE TESTING SPECIFICATIONS.

RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FED STATUTES TITLE 18 CHAPTER 47.

THE MATERIAL WAS NOT EXPOSED TO MERCURY OR ANY METAL ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURE DURING PROCESSING OR WHILE IN OUR POSSESSION.

NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

THE RESULTS REPORTED RELATE ONLY TO THE ITEMS TESTED.

## SOURCE INFORMATION

MELT SOURCE: CANTON CAST ROLL MELT COUNTRY: U.S.A HOT ROLL SOURCE: LORAIN 9/10, U.S.A  
MELT METHOD: EF BLOOM RED. RATIO: 1177.6END OF DATA CC END OF DATA  
WITH SHIPMENT 1 COPY PRINTED AT SHIPPING AREA  
FAX SHIP TO 1 COPY ATTENTION EDWARD ZAPOLA 1-814-532-5684  
FILE 1 COPYG. KRUTH  
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES



# B/E Aerospace, Inc.

Page: 1 of 1

## CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191  
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR  
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


### Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

**FIRM: DART AEROSPACE LTD**

**PURCHASE ORDER#: PO24258**

LNE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
2	50	EA	ANS25-416R10		R34000	PILGRIM SCREW (AZ)	1GP79		

  
Jason Lewis  
Vice President of Quality

05/20/14

# PILGRIM

Screw Corporation

## PACKING LIST

ARIZONA - 480-917-2500

SHIPPED FROM  
259 DEXTER STREET and 120 SPRAGUE STREET  
PROVIDENCE, RI 02907

RHODE ISLAND - 401-274-4090

8/30/2013



PAC136581

BE  
BILL TO: B/E AEROSPACE  
CONSUMABLES MANAGEMENT  
MIAMI FL 33102-5263  
P.O. BOX 025263

SHIP TO: B/E AEROSPACE  
CONSUMABLES MANAGEMENT  
9835 NW 14TH STREET  
MIAMI, FL 33172

OUR ORDER #  
ORD112420

TERMS  
Net 30\*DNI\*033101490

FREIGHT SHIP VIA  
C FedEx Ground

SHIPPING DATE  
8/30/2013

CUSTOMER PO #:



0LXY82

QTY

U/M

PART #

DRAWING #



23,019

EA



AN525-416R10  
1/4-28 X 5/8 PH RD WSHR 4037/Cd2  
NOT BEFORE  
R3400LXY82

NASM525

Revision: 2

LOT#:

R34000 QTY: 23,019.00 pc#278  
6 CTNS, TOTAL WT. 246.60 LBS WITH 181 ON BACKORDER  
Compliant with DFARS 252-225-7009 Restriction on Acquisition of Certain  
Articles Containing Specialty Metals  
MFR C OF C  
CHEM AND PHYS  
MATERIAL AND PROCESS CERTS

DFARS COMPLIANT 252. 225-7009

CLAUSES A, A.1, A.3, B, C, E, H, P, U, V APPLY

PILGRIM LATEST REV:2 PLEASE NOTIFY OF ANY NEWER REV  
REQUESTS  
SHIPPING INSTRUCTIONS:

### CERTIFICATE OF COMPLIANCE

We hereby certify that all items delivered on this invoice comply with all applicable drawing, specification, and purchase order requirements. Evidence of such is on file for review for a minimum of 10 years. All products manufactured by Pilgrim Screw are of domestic origin and have not come in contact with mercury while in our possession. Also all special processes were performed by approved sources at the time of manufacture. Shortage claims must be made within (5) days after receipt of the goods. Quality claims must be made within (30) days after receipt of the goods. Returns will not be accepted without a 'Return Material Authorization' number. All goods returned must have the freight prepaid.

MADE IN THE USA

Authorized Rep.  
PILGRIM  
R  
1

# PILGRIM

Screw Corporation

## PACKING LIST

ARIZONA - 480-917-2500

SHIPPED FROM  
259 DEXTER STREET and 120 SPRAGUE STREET  
PROVIDENCE, RI 02907

RHODE ISLAND - 401-274-4090

8/30/2013



PAC136581

BE  
BILL TO: B/E AEROSPACE  
CONSUMABLES MANAGEMENT  
MIAMI FL 33102-5263  
P.O. BOX 025263

SHIP TO: B/E AEROSPACE  
CONSUMABLES MANAGEMENT  
9835 NW 14TH STREET  
MIAMI, FL 33172

OUR ORDER #  
ORD112420

TERMS  
Net 30\*DNI\*033101490

FREIGHT SHIP VIA  
C FedEx Ground

SHIPPING DATE  
8/30/2013

CUSTOMER PO #:



0LXY82

QTY

U/M

PART #

DRAWING #

**\*\*NO OVERSHIPMENTS\*\***

IF UNDER 150 LBS SHIP FEDEX GROUND ACCT# 0331-0149-0 MARK:  
COLLECT

IF OVER 150 LBS, SHIP FEDEX FREIGHT ECONOMY ACCT 018757

**\*\*\*DO NOT INSURE OR DECLARE A VALUE FOR THIS SHIPMENT\*\*\***

Schedule B#: 7318159000  
ECCN #: 9A991d "NLR"

SHIPPING INSTRUCTIONS: LABEL ON OUTSIDE OF BOX

HONEYWELL SOURCE ACCEPTED:

STAMP IMPRESSION

DATE:



8/30/2013

**\*\*\*\*BOXES MUST NOT EXCEED 40 LBS EACH\*\*\*\***

## CERTIFICATE OF COMPLIANCE

We hereby certify that all items delivered on this invoice comply with all applicable drawing, specification, and purchase order requirements. Evidence of such is on file for review for a minimum of 10 years. All products manufactured by Pilgrim Screw are of domestic origin and have not come in contact with mercury while in our possession. Also all special processes were performed by approved sources at the time of manufacture. Shortage claims must be made within (5) days after receipt of the goods. Quality claims must be made within (30) days after receipt of the goods. Returns will not be accepted without a 'Return Material Authorization' number. All goods returned must have the freight prepaid.

MADE IN THE USA

Page # 2

*Rafael R. L.* Authorized Rep.

PURCHASER  
R



**Pilgrim  
Screw**  
CORPORATION

Established 1932

**CHEMICAL AND PHYSICAL CERTIFICATE**



**SOLD TO**

B/E AEROSPACE  
CONSUMABLES MANAGEMENT  
MIAMI FL 33172

**MADE IN THE USA**

CAGE CODE: 47253

DOCUMENT # PSQR0001 REV 4

**MANUFACTURED BY**

PILGRIM SCREW CORPORATION  
120 SPRAGUE STREET  
PROVIDENCE RI 02907  
USA

TEL. 401-274-4090 FAX. 401-861-9890

**CUSTOMER PO #/ CONTRACT #**  
0LXY82

**PACKING LIST #**  
PAC136581

**PURCHASE QTY**  
23,019

**LOT # / JOB #**  
R34000

**MANUFACTURE DATE**  
9/3/2013

**CERTIFICATION DATE**  
9/3/2013

**RAW MATERIAL HEAT #**  
10256181

**MATERIAL GRADE**  
UNS G86300

**RAW MATERIAL SOURCE**  
WIRETECH/CHARTER

**SPECIFICATION/PART# - DRAWING # - REVISION**  
AN525-416R10 NASM525 2

**NOMENCLATURE/ITEM DESCRIPTION**  
1/4-28UNF-3A X 5/8 PH RD WSHR HD MACHINE SCRE

**PROCUREMENT SPECIFICATION**  
NASM7839

**THREAD SPECIFICATION**  
FED-STD-H28/2B/20B(22)

**MATERIAL SPECIFICATION**  
MIL-S-6050

**HEAT TREAT SPECIFICATION**  
AMS-H-6875B/AMS 2759/1E

**FINISH SPECIFICATION**  
AMS-QQ-P-416C TYPE II CL 3

**NOTES** COMPLIANT WITH DFARS252.225-7009

**QA TEST SUMMARY**

**OTHER TESTS**

**UTLIMATE TENSILE LBS / P.S.I.**  
4745/130342

**MAGNETIC PERMEABILITY**  
N/A

**HEAD STRUCTURE**  
DECARBURIZATION

**HARDNESS**  
30-31 HRC

**YIELD LBS / P.S.I.**  
N/A

**MAGNETIC PARTICLE INSP.**

**TORQUE IN / LBS**  
N/A

**SHEAR LBS / P.S.I.**  
N/A

Test data will be on file for a least 10 years from the date of manufacture, or as agreed upon in the contract. This lot has been produced, sampled, tested, inspected, and marked in accordance with all contact and specification requirements, and the material complies with all the contract and specification requirements. The product specified herein was not in contact with Mercury while in our possession. Class 1 ozone-depleting substances of the clean air amendment of 1990 were not used in the design, manufacture, or test of the item.

Electronically counted quantity is within +/- 1% Specified.

Representative  
P  
1



**WireTech, Inc.**

6440 E. Canning Street  
Los Angeles, CA 90040  
Phone (323) 722-4933  
Fax (323) 721-2738

SOLD TO

**Pilgrim Screw**  
259 Dexter Street  
Providence, RI 02907  
USA

WORK ORDER  
**99297A**

**CERTIFICATION**  
HEAT NO.  
**10256181**  
SALES ORDER / RLS  
**849809 / 3**  
ISO 9001-2000 REGISTERED



MECHANICAL TESTING  
CERT # 911.01

CERT# 911.01

CUSTOMER P.O. <b>65692</b>	CUSTOMER PART <b>RMWG86300-255D</b>	QUANTITY <b>3,056 Lbs</b>	CARRIERS <b>4</b>	LADING NO <b>00104481</b>	SHIPMENT DATE <b>06/19/2013</b>
<b>SPECIFICATION P148630-102550A</b> <b>A-8630 CQ, AQ, SKFG, CHQ WIRE, SEAM &amp; DEARB FREE, SAIP Zinc Phosphate, Lime &amp; Stearate Coating,</b> <b>Size:0.254/0.256 Specifications: AMS 230IH, AMS 6280, MIL-S-6050</b>					
<b>CERTIFICATION REQUIREMENTS</b>					
<b>Chemical Properties</b>					
<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>P</b>	<b>S</b>	<b>Cu</b>
<b>.31</b>	<b>.250</b>	<b>.82</b>	<b>.008</b>	<b>.022</b>	<b>.07</b>
<b>Ni</b>	<b>Cr</b>	<b>Mo</b>			
<b>.43</b>	<b>.44</b>	<b>.17</b>			
<b>Physical Properties</b>					
<b>Grain Size Inclusions Macro</b>		<b>Cleanliness Mill Source</b>			
<b>6 S2-R1-C2</b>		<b>GOOD</b>		<b>F&amp;S=0</b>	
<b>Country of Origin</b>		<b>Charter</b>			
<b>USA - DFAR Compliant</b>					
<b>Mechanical Properties</b>					
<b>TEST</b>	<b>UNITS</b>				<b>Results</b>
<b>Tensile Strength</b>	<b>KSI</b>				<b>76.1</b>
<b>Yield Strength</b>	<b>KSI</b>				<b>64.7</b>
<b>% Elongation</b>	<b>%</b>				<b>29</b>
<b>% Reduction of Area</b>	<b>%</b>				<b>75.1</b>
<b>Rockwell Hardness B Scale</b>	<b>HRB (s)</b>				<b>82</b>
<b>Decarb (Total)</b>	<b>In</b>				<b>0.00</b>

Merchandise covered by this invoice is warranted to be free from defects in workmanship or material but not for any specific length of time, type or measure of service. No claim for allowance will be recognized unless presented in writing within 10 days time after receipt of material. Our maximum liability for any claim predicated upon defective merchandise is limited to replacement of it, or to repayment of it, or to repayment of the purchase price thereof, as we elect. Material cut to specific length or size cannot be returned for credit and request for cancellation of such orders will not be considered if manufacture has been commenced. Buyer, by acceptance of the merchandise covered by this invoice, agrees to the foregoing terms and conditions and those set forth on the reverse hereof. "The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal statutes including Federal law, Title 18, Chapter 47."

REPRODUCTION OF THIS CERTIFICATION IS NOT ALLOWED UNLESS IN FULL

Wire Tech, Inc. metallurgical laboratory is accredited in the following test: chemical analysis per ASTM E 415, mechanical testing per ASTM A 370, Rockwell hardness per ASTM E 18, metallographic mount preparation per ASTM E 3, decarburization depth per ASTM E 1077, IFI 140, inclusion rating per ASTM E 45, decarburization performed as per IFI 140.

The reported Chemical and Physical Properties are Melt Source results. Transcribed from mill certificates. HRB(W) are hardness results performed with a 1/16" carbide ball. Unless otherwise specified, HRB and HRC results are conversions from ASTM A370 tables 1 and 2. \*Test result not covered by our current A2LA accreditation. Tests which have been undertaken by a subcontractor laboratory that is not accredited are not endorsed by A2LA or covered by Wire Tech, Inc. A2LA accreditation.

DFAR Material per Clauses 252.225-7014 ALT. 1, 252.225-7009, & 225.003(9)

TEST RESULTS RELATE ONLY TO THE ITEMS TESTED.

"LATEST REVISIONS OF ASTM"

Material is free of mercury, radium, or alpha contamination.

*Handwritten signature*



# CHARTER STEEL

A Division of  
Charter Manufacturing Company, Inc.

MAIL

1658 Cold Springs Road  
Saukville, Wisconsin 53080

(262) 268-2400

1-800-437-8789

FAX (262) 268-2570

## CHARTER STEEL TEST REPORT Reverse Has Text And Codes

Wiretech Incorporated  
6440 East Canning Street  
Attn: Andre Stephan  
Los Angeles, CA-90040

Cust P.O.	7039A
Customer Part #	8630C1A090-C
Charter Sales Order	70042645
Heat #	10256181
Ship Lot #	4208374
Grade	8630 R SK FG AQ 23/64
Process	HRSA
Finish Size	23/64

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed below and on the reverse side, and that it satisfies these requirements.

### Test Results of Heat Lot# 10256181

Lab Code: 7388												
CHEM	C	MN	P	S	SI	NI	CR	MO	CU	SN	V	
%Wt	.31	.82	.008	.022	.250	.43	.44	.17	.07	.006	.004	
	AL	N	B	TI	NB							
	.037	.0050	.0001	.002	.003							
JOMINY(HRC)	JOM01	JOM02	JOM03	JOM04	JOM05	JOM06	JOM07	JOM08	JOM09	JOM10	JOM11	JOM12
	52	50	48	42	36	33	30	28	27	26	25	25
	JOM13	JOM14	JOM15	JOM16	JOM18	JOM20	JOM22	JOM24	JOM26	JOM28	JOM30	JOM32
	25	24	24	24	23	22	22	22	21	21	20	20

JOMINY SAMPLE TYPE ENGLISH = R JOMINY LAB = 0358-01  
MACRO ETCH SURFACE = 1 MACRO ETCH RANDOM = 1 MACRO ETCH CENTER = 1  
AMS 2301 FREQUENCY AVERAGE = .00 AMS 2301 FREQUENCY INDIVIDUAL = .00  
AMS 2301 SEVERITY AVERAGE = .00 AMS 2301 SEVERITY INDIVIDUAL = .00  
CHEM. DEVIATION EXT.-GREEN = 278433

### Test Results of Rolling Lot# 1096827

REDUCTION RATIO = 299:1

### Test Results of Processing Lot# 4205811,4208374

	# of Tests	Min Value	Max Value	Mean Value	
TENSILE	1.0	74.1	74.1	74.1	TENSILE LAB = 0358-02
REDUCTION OF AREA	1	70	70	70	RA LAB = 0358-02
ROCKWELL B	1	77	77	77	RB LAB = 0358-02

NUM DECARB = 1 FREE FERRITE DECARB = .000 FREE FERR & PARTIAL DECARB = .002  
CP SPHERO % LAB = 0358-02 NUM SPHERO = 1 SPHERODIZATION = 90.0

### Specifications:

Manufactured per Charter Steel Quality Manual Rev 9,08-01-09  
Meets customer specifications with any applicable Charter Steel exceptions for the following customer documents:  
Customer Document = AMS 6280L Revision = NOV-12 Dated =

### Additional Comments:

Charter Steel  
Saukville, WI, USA



Page 1 of 1

Rem: Load1,Fax0,Mail0

This MTR supersedes all previously dated MTRs for this order

*Janice Barnard*  
Janice Barnard  
Manager of Quality Assurance  
05/20/2013



The following statements are applicable to the material described on the front of this Test Report:

1. Except as noted, the steel supplied for this order was melted, rolled, and processed in the United States meeting DFAR's compliance.
2. Mercury was not used during the manufacture of this product, nor was the steel contaminated with mercury during processing.
3. Unless directed by the customer, there are no welds in any of the coils produced for this order.
4. The laboratory that generated the analytical or test results can be identified by the following key:

Certificate Number	Lab Code	Laboratory		Address
0358-01	7388	CSSM	Charter Steel Melting Division	1653 Cold Springs Road, Saukville, WI 53080
0358-02	8171	CSSR/CSSP	Charter Steel Rolling/Processing Division	1658 Cold Springs Road, Saukville, WI 53080
0358-03	123633	CSFP	Charter Steel Ohio Processing Division	6255 US Highway 23, Risingsun, OH 43457
0358-04	125544	CSCM/CSCR	Charter Steel Cleveland	4300 E. 49th St., Cuyahoga Heights, OH 44125-1004
.	.	--	Subcontracted test performed by laboratory not in Charter Steel system	

5. When run by a Charter Steel laboratory, the following tests were performed according to the latest revisions of the specifications listed below, as noted in the Charter Steel Laboratory Quality Manual:

Test	Specification	CSSM	CSSR/CSSP	CSFP	CSCM/CSCR
Chemistry Analysis	ASTM E415; ASTM E1019	X			X
Macroetch	ASTM E381	X			X
Hardenability (Jominy)	ASTM A255; SAE J406; JIS G0561	X			X
Grain Size	ASTM E112	X	X	X	X
Tensile Test	ASTM E8; ASTM A370		X	X	X
Rockwell Hardness	ASTM E18; ASTM A370	X	X	X	X
Microstructure (spheroidization)	ASTM A892		X	X	
Inclusion Content (Methods A, E)	ASTM E45		X	X	X
Decarburization	ASTM E1077		X	X	X

Charter Steel has been accredited to perform all of the above tests by the American Association for Laboratory Accreditation (A2LA). These accreditations expire 01/31/15.

All other test results associated with a Charter Steel laboratory that appear on the front of this report, if any, were performed according to documented procedures developed by Charter Steel and are not accredited by A2LA.

6. The test results on the front of this report are the true values measured on the samples taken from the production lot. They do not apply to any other sample.
7. This test report cannot be reproduced or distributed except in full without the written permission of Charter Steel. The primary customer whose name and address appear on the front of this form may reproduce this test report subject to the following restrictions:
  - It may be distributed only to their customers
  - Both sides of all pages must be reproduced in full
8. This certification is given subject to the terms and conditions of sale provided in Charter Steel's acknowledgement (designated by our Sales Order number) to the customer's purchase order. Both order numbers appear on the front page of this Report.
9. Where the customer has provided a specification, the results on the front of this test report conform to that specification unless otherwise noted on this test report.



# SMITH & WESSON

POST OFFICE BOX 2208  
SPRINGFIELD, MA 01102

## PROCESS CERTIFICATION/SHIPPER

<b>Customer</b>  PILGRIM SCREW CORPORATION 259 DEXTER STREET PROVIDENCE, RI. 02907	<u>P.O. No. / Order No.</u> 67140	<u>Order Date</u> 8/26/13
	<u>Part No.</u> SEE REMARKS	<u>Quantity</u> SEE REMARKS

### Service:

THROUGH HARDEN TO 126-145 KSI - RC 27-32 PER AMS-H-6875B / AMS2759/1E

MATERIAL: UNS G86300

VAPOR BLAST

### Remarks:

AN525-416R10

R34000

6 PANS

### Results:

SPECIFIED HARDNESS: 126-145 KSI RC 27-32

ACTUAL HARDNESS: 138-141 KSI RC 30-31

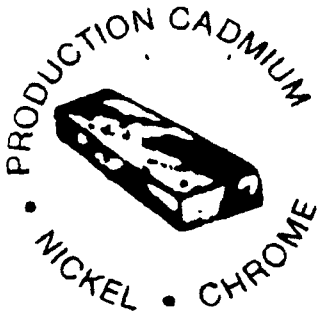
VAPOR BLAST COMPLETE

Certified by: 

Smith & Wesson  
2100 Roosevelt Avenue  
Springfield, Ma 01102

Tel: (413) 781-8300  
Fax: (413) 747-3423

Of Smith & Wesson's Specialty Services



*New Method Plating Co., Inc.*

QUALITY  
MANAGEMENT  
SYSTEM  
ISO 9001:2000  
AS9100 REV. B  
CERTIFIED

Established 1931



43 Hammond St.  
Worcester, MA 01610  
Phone 508.754.2671  
Fax 508.754.1981  
www.newmethodplating.com

**CERTIFICATE OF COMPLIANCE**

COMPANY PILGRIM SCREW CORP.

DATE 8/30/13

PO#	LOT#	QUANTITY
<u>67254</u>	<u>R34000</u>	<u>23200</u>

CADMIUM PLATED IN ACCORDANCE WITH AMS QQ-P-416C  
Class III, Type II (Clear\_\_\_Yellow X Black\_\_\_)

Hardness: 27-32 HRC


☒ NO BAKE

- ☐ Before plating, bake at 375+/-25F for 4 hours. After plating, bake at 375+/-25F for 3 hours.  
☐ Before plating, bake at 275+/-25F for 5 hours. After plating, bake at 275+/-25F for 23 hours.  
☐ Before plating, bake at 375+/-25F for 4 hours. After plating, bake at 375+/-25F for 23 hours.

**Thickness Test Results**


Accept ☒ Reject ☐ Min.: Spec. .0002 Read .00039 Avg .00043

**Adhesion Test Results**

Accept ☒ Reject ☐ Inspected by: 

**Certification**

This lot has been processed, sampled, tested, and inspected in accordance with the contract and specification requirements listed above, and the plating and conversion coating complies with those contract and specification requirements. Process control data is on file and is available upon request. We certify that these parts have been processed in a mercury free environment.

Signed:  Title: Quality Manager Date: AUG 30 2013

Christopher J. Capalbo

CERTIFICATION OF COMPLIANCE  
INSPECTION REPORT

**MET-L-TEST LABORATORY**

**NADCAP APPROVED FACILITY**

115 BROWNING STREET

STRATFORD, CT 06615

TELEPHONE (203) 377-2429

FAX (203) 377-0517

WEBSITE: WWW.METLTESTLABORATORY.COM

MAGNETIC PARTICLE  
PENETRANT INSPECTION  
RADIOGRAPHIC INSPECTION

**CUSTOMER:** Pilgrim Screw Corporation  
259 Dexter Street  
Providence, RI 02907

LAB NO.	CUSTOMER P.O.	DATE SHIPPED	DATE INVOICE	INVOICE NO.
W2148	67276	09-03-13		W2148

PART NO.	DESCRIPTION	QUANTITY
P/N MS20392-1C9	R33784	*80* PCS
P/N MS20392-2C49	R33847	*32* PCS
P/N MS20392-2C11	R33867	*125* PCS
P/N AN252-416R10	R34000	*50* PCS
P/N MS24694S215	R33732	*32* PCS

M.P.I. PER ASTM E1444-12. I.A.W. NASM5673(-1C9,2C49,2C11) & NASM7839 (-6R10,S215)

**MAGNETIC PARTICLE INSPECTION**

MAGNETIC PARTICLE TECHNIQUES ARE ON FILE AT MET-L-TEST FOR REVIEW.

**RADIOGRAPHIC INSPECTION**

RADIOGRAPHIC INSPECTION TECHNIQUES ARE ON FILE AT MET-L-TEST FOR REVIEW.

**PENETRANT INSPECTION**

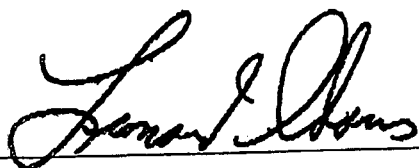
PENETRANT  
EMULSIFIER  
DEVELOPER

PENETRATING TIME 30 MINUTES  
EMULSIFYING TIME 2 MINUTES MAX.  
DEVELOPING TIME 15 MINUTES  
NO PRE-PENETRANT ETCH DONE AT THIS FACILITY

**INSPECTION RESULTS**

REJECTED: 0 PIECE(S) THAT SHOW INDICATIONS CONSIDERED DETRIMENTAL.

COMMENTS: \*319\* PCS ACCEPTED @ M.P.I.



MLT  
MC

III 09-03-13

INSPECTED BY

LEVEL DATE



NDT LEVEL III

WHITE/YELLOW COPIES: CUSTOMER, PINK COPY: MLT FILES



# B/E Aerospace, Inc.

Page: 1 of 1

## CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191  
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR  
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


### Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

**FIRM: DART AEROSPACE LTD**

**PURCHASE ORDER#: PO24258**

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
3	1	EA	MS20257C4-7200		70073	LA DEAU MFG	06192		

  
Jason Lewis  
Vice President of Quality

05/20/14

# Alarin Aircraft Hinge, Inc.

6231-Randolph  
Commerce, CA 90040  
(323) 725-1555 Fax (323) 726-0639  
E-mail: alarinsales@alarin.com

Job Number	Alarin Order No. / Delivery No.	Required Ship Date	Customer Order Number	Invoice Number	Invoice Date
<b>A126928A</b>	290800 AD27063	2-Aug-12	0ELE86		

**INVOICE TO:**

B/E AEROSPACE CONSUMABLES MANAGEMENT  
P.O. BOX 025263  
MIAMI, FL 33102-5263

**SHIP TO:**

B/E AEROSPACE CONSUMABLES MANAGEMENT  
9835 NW 14TH ST.  
MIAMI, FL 33172

Shipping Terms: FOB

Payment Terms: COD, 1/2% 10, Net 30 days

ALARIN STANDARD TERMS AND CONDITIONS OF SALE APPLY AND ARE AVAILABLE UPON REQUEST

Balance On Order	Quantity Shipped	Description	Unit Price	Amount
PCS 250	<b>250</b>	LINE 2: MS20257C4-7200	\$	\$ -
SHIP VIA: IF UNDER 150# SHIP FEDEX ACCT# 0331-0149-0				\$ -
IF OVER 150# SHIP FEDEX NATIONAL LTL ACCT# 018757				\$ -
Shipping			\$ -	\$ -
Handling			\$ -	\$ -
Total				\$ -

Date Shipped	Complete	Partial	Weight	Number Cartons
<b>8/3/12</b>	<b>X</b>		<b>697#</b>	<b>6</b>

Routing Number:

**FEDEX FREIGHT**

**MATERIAL CERTIFICATION INSIDE THE BOX**

Comments:

PLEASE INCLUDE P.O. NUMBER UNDER REFERENCE WHEN CREATING FEDEX LABEL.

# ALARIN AIRCRAFT HINGE, INC.

6231 Randolph St.

Commerce, CA 90040

Phone: (323) 725-1666

Fax: (323) 726-0639

E-Mail: alarinsales@alarin.com

**AJ26928**

Certificate of Conformance Number

**A**

Revision

August 2, 2012

Date Prepared

## Certificate of Conformance

*Alarin Aircraft, Inc. hereby certifies that all items indicated on this document were manufactured, inspected, tested, and found to conform to the applicable drawing(s), and / or specification(s), and all the required process certifications, chemical, physical, metallurgical, and / or test reports are on file and available for customers review upon request.*

Part Number	MS20257C4-7200	Revision:	D
Drawing Number:	MS20257	Revision:	D
Specification Number:	ASMA240	Revision:	
Alarin Job Number:	AJ26928		

Quantity certified on this delivery:	250
Customer Purchase Order Number:	OELE86

*Alarin's Material Traceability Number (MTN) is linked to the material producers certification.*

MTN	PCS.
6175	250

MTN	PCS.

MTN	PCS.

Item	Special Process Provided	Process Vendor	Certification Number

Meredith Kim

Quality Assurance Representative



Meredith Kim  
Signature

Rev. Date: 01/15/03

ALNQ1003